

THE INVENTION CLAIMED IS:

1. A modular fluid casing, comprising:  
a housing having an inlet end and an outlet end and defining a flow channel therebetween, the flow channel in fluid communication with said inlet end and said outlet end; and  
a modular cage removably secured to said housing, said modular cage having a first open end and a second open end and defining an interior cavity, said modular cage received within the flow channel of said housing, wherein the interior cavity of said modular cage is in fluid communication with said inlet end and said outlet end of said housing, and wherein the interior cavity of said modular cage is adapted to receive at least one check valve.
2. The modular fluid casing as claimed in claim 1, further comprising at least one check valve removably seated within the interior cavity of said modular cage, wherein said check valve is in fluid communication with said inlet end and said outlet end of said housing.
3. The modular fluid casing as claimed in claim 2, wherein said modular cage is tubular shaped.
4. The modular fluid casing as claimed in claim 2, wherein said second open end of said modular cage is capable of receiving a check valve.
5. The modular fluid casing as claimed in claim 2, wherein at least one fluid seal is positioned between said housing and said modular cage for fluidly sealing said modular cage within the flow channel of said housing.
6. The modular fluid casing as claimed in claim 2, wherein said modular cage comprises a first gasket positioned adjacent said first open end and a second gasket positioned adjacent said second open end of said modular cage for fluidly sealing said modular cage within the flow channel of said housing.

7. The modular fluid casing as claimed in claim 2, wherein said modular cage further comprises at least one tap in fluid communication with the interior cavity.

8. The modular fluid casing as claimed in claim 2, wherein said housing defines at least one lug extending outwardly from an outer surface of said housing, said lug defining an orifice adapted to receive a fastener.

9. The modular fluid casing as claimed in claim 8, further comprising a fastener, wherein said modular cage defines at least one protrusion extending outwardly from an exterior surface of said modular cage, said protrusion having a slot aligned with the orifice of said lug of said housing, whereby said fastener passes through the orifice and the slot for securing said modular cage to said housing.

10. The modular fluid casing as claimed in claim 2, wherein said modular cage is removably secured to said housing via a retainer attached to an external clamp.

11. A check valve arrangement, comprising:

a housing having an inlet end and an outlet end and defining a flow channel therebetween, the flow channel in fluid communication with said inlet end and said outlet end;

a modular cage removably secured to said housing, said modular cage having a first open end and a second open end removably seated within the flow channel of said housing, said modular cage defining an interior cavity, the interior cavity defining a first diameter portion and a second diameter portion; and

a plurality of check valves removably seated within the first diameter portion and the second diameter portion of the interior cavity of said modular cage, wherein said check valves are in fluid communication with said inlet end and said outlet end of said housing.

12. The check valve arrangement as claimed in claim 11, wherein a lip separates the first diameter portion from the second diameter portion of the interior cavity.

13. The check valve arrangement as claimed in claim 11, wherein the first diameter portion and the second diameter portion of the interior cavity of said modular cage have the same diameter.

14. The check valve arrangement as claimed in claim 11, wherein the first diameter portion has a diameter less than a diameter of the second diameter portion of the interior cavity of said modular cage.

15. The check valve arrangement as claimed in claim 11, wherein the first diameter portion of the interior cavity holds one of said check valves in place within said modular cage.

16. The check valve arrangement as claimed in claim 11, wherein at least one fluid seal is positioned between said housing and said modular cage for fluidly sealing said modular cage within said flow channel of said housing.

17. The check valve arrangement as claimed in claim 11, further comprising a first gasket positioned adjacent said first open end of said modular cage and a second gasket positioned adjacent said second open end of said modular cage, wherein said gaskets provide a fluid seal between the interior cavity of said modular cage and said inlet end and said outlet end of said housing.

18. The check valve arrangement as claimed in claim 11, further comprising a valve gasket positioned between an outer surface of each of said check valves and the interior cavity of said modular cage.

19. The check valve arrangement as claimed in claim 11, wherein said modular cage comprises at least one tap in fluid communication with the interior cavity.

20. The check valve arrangement as claimed in claim 11, wherein said modular cage comprises a tap for each check valve seated within the interior cavity of said modular cage.

21. The check valve arrangement as claimed in claim 11, wherein said modular cage is removably secured to said housing via a retainer attached to an external clamp.

22. The check valve arrangement as claimed in claim 11, further comprising a fastener removably securing said housing to said modular cage.

23. The check valve arrangement as claimed in claim 11, wherein said housing defines at least one lug extending outwardly from an outer surface of said housing, said lug having an orifice adapted to receive a fastener.

24. The check valve arrangement as claimed in claim 23, further comprising a fastener, wherein said modular cage defines at least one protrusion extending outwardly from an exterior surface of said modular cage, said protrusion having a slot aligned with the orifice of said lug of said housing, whereby said fastener passes through the orifice and the slot for securing said modular cage to said housing.

25. A method of installing check valves in line with respect to a fluid conduit using a modular fluid casing, the modular fluid casing includes a housing having an inlet end and an outlet end and defining a flow channel therebetween, and a modular cage having a first open end and a second open end and defining an interior cavity, the method comprising:

- a. inserting at least one check valve into the interior cavity of the modular cage;
- b. inserting the modular cage into the flow channel of the housing;
- c. securing the modular cage to the housing; and
- d. installing the modular fluid casing in line with respect to a fluid conduit.